

REMARKS

STATUS OF THE CLAIMS

Claims 17 and 19-23 were pending. By amendment herein, claim 17 now explicitly recites that the recombinant vector particle comprises an alphavirus replicon and that the replicon comprises a heterologous sequence. Support for the amendment to claim 17 can be found through the specification as filed, for example on page 15, line 18 (defining recombinant alphavirus particle as necessarily including an alphavirus replicon) and page 15, line 16 (replicon may comprise a heterologous sequence). Thus, claims 17 and 19-23 are pending as shown above.

35 U.S.C. § 102(A) AND (B)

Claims 17 and 21 were rejected under 35 U.S.C. § 102 as allegedly anticipated by Glasgow *et al.* (*Virology* 1991, Vol. 185, pp. 741-748) or alternatively, as allegedly anticipated by Glomb-Reinmund *et al.* (*J. Virol.* 1998, Vol. 72, pp. 4281-4287). Although the Examiner acknowledged that neither reference teaches alphavirus particles that infect human dendritic cells (DCs), it was maintained that because the alphaviruses contain mutations are in the same region as claimed by Applicants, the molecules described in the references would inherently exhibit the same biological function of human DC tropism as the molecules of claims 17 and 21. (Final Office Action, paragraphs 4 and 8).

Applicants traverse the rejection and supporting remarks.

In order to be an anticipatory reference, the reference cited by the Office must disclose each and every element of the claims, including each and every functional or biological limitation. *See, e.g., Hybritech v. Monoclonal Antibodies*, 231 USPQ 81 (Fed. Cir. 1986); M.P.E.P § 2173.05(g) Functional Limitations, Eighth Edition. Moreover, the single source must disclose all of the claimed elements arranged as in the claims. *See, e.g., Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913 (Fed. Cir. 1989). Simply put, the law requires identity as between the prior art disclosure and the invention. *See, e.g., Kalman v. Kimberly-Clark Corp.* 218 USPQ 781 (Fed. Cir. 1983), *cert. denied*, 484 US 1007 (1988).

For the reasons of record, Applicants submit that the claimed human DC-tropism is not disclosed, either expressly or inherently, in either Glomb-Reinmund or Glasgow. In addition, Applicants note that the pending claims are directed to recombinant alphavirus particles. As clearly defined in the specification, recombinant alphavirus particles cannot be naturally occurring:

Use of the term "recombinant" when referring to alphavirus particles means that the alphavirus particles [that] have been generated or modified by molecular genetic manipulation, and [is] does not refer to wild-type alphaviruses as found in nature. page 15, lines 23-25 of the specification.

Furthermore, the claimed molecules contain a replicon that comprises a heterologous sequence. *See, e.g.*, page 15, line 16. Thus, the pending claims are directed to recombinant particles that (1) contain the specified mutation in E2; (2) are human DC-tropic, (3) are non-naturally occurring; and (4) contain a replicon that includes a heterologous sequence.

Neither reference discloses molecules as recited in the claims. Glomb-Reinmund relates entirely to a naturally occurring Semliki forest virus. *See, e.g.*, Abstract of Glomb-Reinmund. As noted above, naturally occurring viruses are not recombinant and, therefore, Glomb-Reinmund cannot anticipate the pending claims.

Moreover, neither Glomb-Reinmund nor Glasgow discloses or suggests recombinant particles containing a replicon comprising a heterologous sequence, as claimed. Simply put, Glomb-Reinmund and Glasgow do not, expressly or inherently, describe or demonstrate the molecules claimed by Applicant. Not only do these references fail to disclose human DC-tropism, they fail to disclose recombinant molecules as set forth in the claims.

Thus, for the reasons of record and those presented herein, Glasgow and Glomb-Reinmund do not anticipate any of the pending claims and withdrawal of the remaining rejections is respectfully requested.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance. If the Examiner notes any further matters which the Examiner believes may be expedited by a telephone interview, the Examiner is requested to contact the undersigned.

Please direct further communication regarding this application to:

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Respectfully submitted,

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